ABSTRACT OF THE DISCLOSURE

An automatic frequency controller restores symbols carried on a received signal by a data converter, and uses an in-phase and a quadrature component obtained by phase measurement from the symbol restored by the data converter to calculate first and second phase errors. The first and second phase errors are summed together by an adder to produce a phase error of a waveform more moderate than the first phase error to decrease and increase error correction in the ranges of smaller and larger phase errors, respectively, to elongate a period of positive amplitude to expand the desired range of polarity of the phase error. A multiplier multiplies the result from the summation with a coefficient to normalize it. An integrator integrates the normalized data to produce a control signal for use in restoring the symbols.